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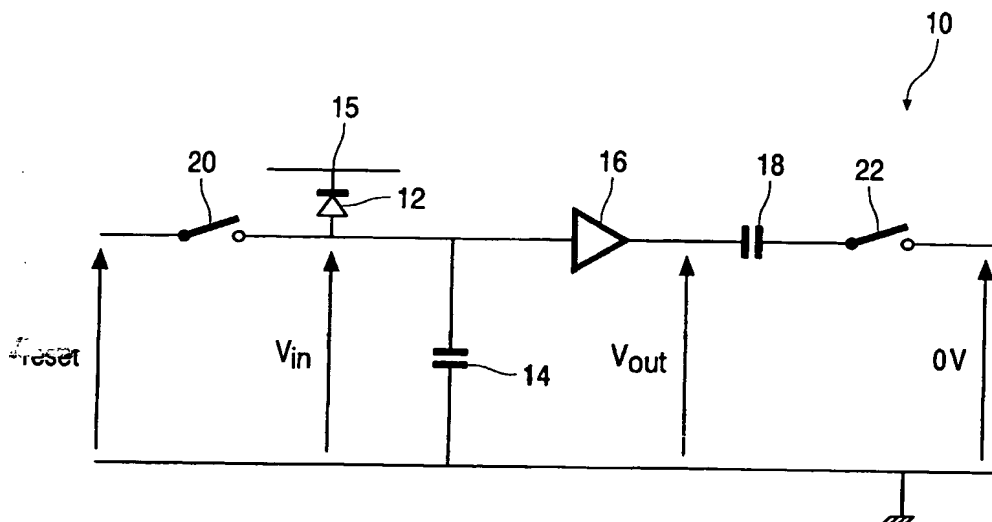
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CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT,

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(54) Title: **IMAGE SENSOR**



(57) An image sensor has a plurality of pixels, each pixel having a photodiode (12), a voltage amplifier (16) having gain greater than 1 and a sampling capacitor (18) charged by the voltage amplifier. In this arrangement, each pixel provides gain through voltage amplification. This enables the sampling capacitor (18) to be kept to a low size, so that the pixel circuitry occupies the smallest possible space, thereby enabling large aperture pixels to be formed.



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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 01/57554 A (PHILIPS CORP INTELLECTUAL PTY ; KONINKL PHILIPS ELECTRONICS NV (NL)) 9 August 2001 (2001-08-09) cited in the application figure 2 page 8, line 3, paragraph 1 - page 10, paragraph 1 page 11, paragraph 2 page 17, line 23 - page 18, paragraph 1</p> <p style="text-align: center;">-/-</p>	<p>1,2, 11-15</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ABDALLA M A ET AL: "An integrating CMOS APS for X-ray imaging with an in-pixel preamplifier"</p> <p>NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH, SECTION - A: ACCELERATORS, SPECTROMETERS, DETECTORS AND ASSOCIATED EQUIPMENT, NORTH-HOLLAND PUBLISHING COMPANY. AMSTERDAM, NL, vol. 466, no. 1, 21 June 2001 (2001-06-21), pages 232-236, XP004251301</p> <p>ISSN: 0168-9002</p> <p>figure 1</p> <p>Section 2: Pixel Design</p> <p>abstract</p>	1,2,13,14
X	<p>US 6 417 504 B1 (KOZLOWSKI LESTER J) 9 July 2002 (2002-07-09)</p> <p>figure 1</p> <p>column 4, paragraph 2 - column 5, paragraph 4</p>	1,2,13-15
X	<p>PATENT ABSTRACTS OF JAPAN vol. 2003, no. 03, 5 May 2003 (2003-05-05) -& JP 2002 344809 A (CANON INC), 29 November 2002 (2002-11-29)</p> <p>abstract</p> <p>figure 10</p> <p>paragraph '0069! - paragraph '0079!</p>	1,2,14,15
A	<p>EP 1 271 930 A (CANON KK) 2 January 2003 (2003-01-02)</p> <p>figures 4-6,8</p> <p>paragraph '0052! - paragraph '0064!</p>	1,14

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